State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
June 12, 2002

ITEM: 9

SUBJECT: **PUBLIC HEARING: AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO REGION (9) TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD (TMDL) FOR DIAZINON IN THE CHOLLAS CREEK WATERSHED, SAN DIEGO COUNTY (Tentative Resolution No. R9-2002-0123).** (*Linda Pardy and James Smith*)

PURPOSE: To adopt Tentative Resolution No. R9-2002-0123 amending the Water Quality Control Plan for the San Diego Basin (9) (Basin Plan) to include a total maximum daily load (TMDL) for diazinon in the Chollas Creek watershed.

PUBLIC NOTICE: Federal Clean Water Act regulations (40 CFR 25.5) require the Regional Board to mail notice of a proposed Basin Plan amendment to all interested parties at least 45 days in advance of the public hearing. State CEQA regulations (23 California Code of Regulations Section 3777) require the Regional Board to make a draft TMDL report (which is a CEQA substitute) available for public comment for at least 45 days in advance of the public hearing. The Notice of Public Hearing for this Basin Plan amendment was posted 54 days in advance of the public hearing (April 19 to June 12). The draft technical report (including the draft Resolution and draft Basin Plan amendment) was available to the public for 45 days in advance of the public hearing (April 28 to June 12). The following actions were taken to fully satisfy all public notice requirements:

<u>Notice of Public Hearing and Notice of Filing</u>

- Mailed to RWQCB agenda mailing list on April 19, 2002
- Posted on RWQCB website on April 19, 2002
- Published in San Diego Union Tribune on April 24, 2002
- Mailed to interested parties list on April 24, 2002

<u>Draft Technical Report (including Draft Resolution and Basin Plan Amendment)</u>

- Posted on RWQCB website on April 28, 2002
- E-mailed to interested parties list on April 29, 2002
- Mailed to interested parties list on April 29, 2002

DISCUSSION: *CWA Section 303(d) Listing for "Toxicity"*

During the past several years, monitoring data collected pursuant to the San Diego Municipal Storm Water Permit (MS4 permit) has consistently revealed toxicity in Chollas Creek during storm events. This data served as the basis for the Regional Board's 1996 addition of Chollas Creek to its Clean Water Act Section 303(d) list of impaired waters. Specifically, Chollas Creek is listed for "toxicity in storm water". Federal law requires the Regional Board to develop a Total Maximum Daily Load (TMDL) for waters on the Section 303(d) list. Accordingly staff began work on a TMDL for Chollas Creek in the late 1990s. The initial step in the TMDL development process was to identify the cause of toxicity. This was accomplished by way of Toxicity Identification Evaluations (TIEs) which revealed that toxicity in Chollas Creek during storm events was due to metals and to the pesticide diazinon. With that information, staff appropriately modified the early draft of the TMDL to address diazinon, as the "causative pollutant", rather than toxicity as the "impairment condition". Staff also initiated a separate TMDL to address metals in Chollas Creek. This process of refining the TMDL based on new information is the required first step in the development of any TMDL. Elimination of the toxic conditions in Chollas Creek cannot proceed without directly addressing the pollutant causing the toxicity. It is appropriate and consistent with federal regulations that this TMDL, written to address the 303(d) listing for toxicity, is based on the reduction of diazinon concentrations in Chollas Creek.

The purpose of a TMDL is to attain applicable water quality objectives and restore the beneficial uses of an impaired water. The purpose of this TMDL is to reduce diazinon concentrations in Chollas Creek as needed to attain the narrative Basin Plan water quality objectives for "Toxicity" and "Pesticides" and to restore the "warm freshwater habitat" (WARM) and "wildlife habitat" (WILD) beneficial uses of Chollas Creek.

The TMDL and Allocations

Because aquatic toxicity is the most significant adverse effect of diazinon and because aquatic toxicity is a function of water column concentrations, this TMDL is a concentration-based, rather than mass emission-based, TMDL. The Numeric Targets and the TMDL (Loading Capacity) are set equal to the California Department of Fish and Game's (DFG's) Water Quality Criteria for the

protection of freshwater aquatic organisms from diazinon. The concentration-based Waste Load Allocations (for point sources) and Load Allocations (for nonpoint sources) are applied equally to all diazinon discharge sources in the Chollas Creek watershed. All allocations are set at 90% of the Numeric Targets resulting in a diazinon allocation equal to 0.072 µg/L under acute exposure conditions and a diazinon allocation of 0.045 µg/L under chronic exposure conditions. These allocations include an explicit 10% margin of safety to account for uncertainties in the TMDL analysis. This concentration-based TMDL and its allocations apply year-round and will be protective during all flow conditions and seasons.

The current average concentration of diazinon in Chollas Creek during storm events is 0.46 µg/L. An 84% reduction of current diazinon loads in Chollas Creek is needed to attain the acute diazinon allocations set forth in this TMDL. A 90% reduction of current diazinon loads is needed to attain the chronic diazinon allocations set forth in this TMDL.

TMDL Implementation

Urban storm water flows are the primary source of diazinon to Chollas Creek. As dischargers of diazinon in urban storm water flows to Chollas Creek, the City of San Diego, City of Lemon Grove, City of La Mesa, San Diego Unified Port District, County of San Diego and the California Department of Transportation (CalTrans) are responsible for implementation of this TMDL. These entities are all regulated under MS4 permits.

The three most important mechanisms to implement the diazinon waste load reductions required by this TMDL are (1) USEPA's ongoing diazinon phase-out and elimination program; (2) modification of the San Diego MS4 Permit as needed for consistency with this TMDL; and (3) activities by the municipal Copermittees in the Chollas Creek watershed to reduce diazinon discharges pursuant to the MS4 Permit and Water Code Section 13267.

Peer Review and Other Regional Board Diazinon TMDLs

The scientific basis of this TMDL has undergone external peer review pursuant to Health and Safety Code Section 57004. Staff has considered and responded to all comments submitted by the peer review panel.

Similar TMDLs for diazinon are currently under development in Regions 2, 5, and 8. This TMDL is consistent with each of the other Regional Board's diazinon TMDLs with respect to overall approach and selection of the DFG's Water Quality Criteria as Numeric Targets.

Written Public Comments

Written comments were submitted by the California Department of Pesticide Regulation; County of San Diego; Environmental Health Coalition, San Diego BayKeeper; and Sierra Club on or before the May 28, 2002 deadline (see attached). We are in the early process of reviewing these letters. Written responses to comments will be provided with the late mailing.

Outreach and Meetings with Responsible Parties

The fourth in a series of public workshops on the proposed TMDL was conducted on May 17, 2002. Staff subsequently met with City of San Diego storm water staff on May 24 to discuss the City's issues and concerns related to TMDL implementation. A follow-up meeting with City staff is planned for June 5.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS

Attachment 1. Tentative Resolution No. R9-2002-0123 and Draft Basin Plan Amendment

Attachment 2. Technical Report (includes Resolution and Basin Plan Amendment)

Attachment 3. Written comments submitted by:

- California Department of Pesticide Regulation
- County of San Diego
- Environmental Health Coalition
- San Diego BayKeeper
- Sierra Club

RECOMMENDATION(S): Adopt Tentative Resolution No. R9-2002-0123.